

AMENDMENTS TO THE CLAIMS

Please add claims 79-85. Please amend claims 6-7, 9, 13 and 19 as follows:

1-5. Cancelled.

6. (Currently Amended) A network management architecture, comprising:
a master node, wherein

said master node is one of a plurality of nodes,
each of said nodes is communicatively coupled to another of said nodes by at least
one of a plurality of optical links,
said nodes comprise a network,
said master node is configured to manage said network by virtue of being
[[configure]] configured to perform a network management activity, and
said network management activity comprises at least one of discovery,
implementation, assurance, and restoration, of a virtual path.

7. (Currently Amended) The network management architecture of claim 6, wherein
said master node maintains topology information regarding ~~a topology~~ of said network.

8. (Previously Presented) The network management architecture of claim 6, further
comprising:

a backup node, wherein
said backup node is configured to perform said network management activity, if a failure
in said network prevents said master node from performing said network
management activity.

9. (Currently Amended) The network management architecture of claim 8, wherein
said backup node maintains first topology information regarding ~~a topology~~ of said
network.

10. (Previously Presented) The network management architecture of claim 9, wherein

said master node maintains second topology information,
said master node is configured to update said first topology information by sending said
second topology information to said backup node.

11. (Previously Presented) The network management architecture of claim 9, wherein
said master node maintains second topology information,
said backup node is configured to update said first topology information by receiving said
second topology information from said master node.

12. (Previously Presented) The network management architecture of claim 8, further
comprising:

a standby node, wherein

said standby node is configured to perform said network management activity, if
said failure prevents said master node and said backup node from
performing said network management activity.

13. (Currently Amended) The network management architecture of claim 12, wherein
said standby node maintains first topology information regarding ~~a topology of~~ said
network.

14. (Previously Presented) The network management architecture of claim 13,
wherein

said backup node maintains second topology information,
said backup node is configured to update said first topology information by sending said
second topology information to said standby node.

15. (Previously Presented) The network management architecture of claim 14,
wherein

said master node maintains third topology information,
said master node is configured to update said second topology information by sending
said third topology information to said backup node.

16. (Previously Presented) The network management architecture of claim 13,
wherein

said backup node maintains second topology information,
said standby node is configured to update said first topology information by receiving
said second topology information from said backup node.

17. (Previously Presented) The network management architecture of claim 16,
wherein

said master node maintains third topology information,
said backup node is configured to update said second topology information by receiving
said third topology information from said master node.

18. (Previously Presented) The network management architecture of claim 12, further
comprising:

a plurality of standby nodes, wherein

said standby node is a one of said standby nodes,
each of said standby nodes is assigned a priority, and
said each of said standby nodes is configured to perform said network management
activity, if said failure prevents said master node, said backup node and any ones
of said standby nodes having a higher priority than said each of said standby
nodes from performing said network management activity.

19. (Currently Amended) The network management architecture of claim 18, wherein
each of said standby nodes maintains first topology information regarding a topology of
said network.

20. (Previously Presented) The network management architecture of claim 19,
wherein

said backup node maintains second topology information,
said backup node is configured to update said first topology information by sending said
second topology information to said each of said standby nodes.

21. (Previously Presented) The network management architecture of claim 20,
wherein
said master node maintains third topology information,
said master node is configured to update said second topology information by sending
said third topology information to said backup node.

22. (Previously Presented) The network management architecture of claim 19,
wherein
said backup node maintains second topology information,
said each of said standby nodes is configured to update said first topology information by
receiving said second topology information from said backup node.

23. (Previously Presented) The network management architecture of claim 22,
wherein
said master node maintains third topology information,
said backup node is configured to update said second topology information by receiving
said third topology information from said master node.

24-78. Cancelled.

79. (New) A network management architecture, comprising:
a master node, wherein
said master node is one of a plurality of nodes,
each of said nodes is communicatively coupled to another of said nodes by at least
one of a plurality of optical links,
said nodes comprise a network,
said master node is configured to manage said network by virtue of being
configured to perform a network management activity, and
said network management activity comprises at least one of discovery,
implementation, assurance, and restoration, of a virtual path;
a backup node, wherein

said backup node is configured to perform said network management activity, if a failure in said network prevents said master node from performing said network management activity; and

a standby node, wherein

said standby node is configured to perform said network management activity, if said failure prevents said master node and said backup node from performing said network management activity,

said standby node maintains first topology information,

said backup node maintains second topology information,

said standby node is configured to update said first topology information by receiving said second topology information from said backup node,

said master node maintains third topology information, and

said backup node is configured to update said second topology information by receiving said third topology information from said master node.

80. (New) A network management architecture, comprising:

a master node, wherein

said master node is one of a plurality of nodes,

each of said nodes is communicatively coupled to another of said nodes by at least one of a plurality of optical links,

said nodes comprise a network,

said master node is configured to manage said network by virtue of being configured to perform a network management activity, and

said network management activity comprises at least one of discovery, implementation, assurance, and restoration, of a virtual path;

a backup node, wherein

said backup node is configured to perform said network management activity, if a failure in said network prevents said master node from performing said network management activity; and

a plurality of standby nodes, wherein

a standby node is a one of said standby nodes,

said standby node is configured to perform said network management activity, if
said failure prevents said master node and said backup node from
performing said network management activity.

each of said standby nodes is assigned a priority, and
said each of said standby nodes is configured to perform said network
management activity, if said failure prevents said master node, said
backup node and any ones of said standby nodes having a higher priority
than said each of said standby nodes from performing said network
management activity.

81. (New) The network management architecture of claim 80, wherein
each of said standby nodes maintains first topology information.

82. (New) The network management architecture of claim 81, wherein
said backup node maintains second topology information,
said backup node is configured to update said first topology information by sending said
second topology information to said each of said standby nodes.

83. (New) The network management architecture of claim 82, wherein
said master node maintains third topology information,
said master node is configured to update said second topology information by sending
said third topology information to said backup node.

84. (New) The network management architecture of claim 81, wherein
said backup node maintains second topology information,
said each of said standby nodes is configured to update said first topology information by
receiving said second topology information from said backup node.

85. (New) The network management architecture of claim 84, wherein
said master node maintains third topology information,

said backup node is configured to update said second topology information by receiving
said third topology information from said master node.